

THE CLAIMS

What is claimed is:

5        1. A pouch or container for forming an envelope to protectively package a product or item therein, said envelope being fabricated of a laminate sheeting comprising:

an outer ply of oriented synthetic plastic film having at least one surface that is corona-discharge treated to render it wettable and receptive to adhesives and

10      printing inks;

an inner ply of synthetic plastic film having at least one surface that is corona-discharge treated to render it wettable and receptive to adhesives and printing inks; and

a water-based adhesive;

15      wherein the corona-discharge treated surfaces are adhesively cold laminated together by the adhesive to produce a laminate having high tensile strength, moisture resistance and tear resistance.

20      2. A pouch as set forth in claim 1, further comprising a paper ply that is adhesively laminated by a water-based adhesive to the outer corona-discharge treated surfaces of the inner and outer plies at ambient temperature to produce a plastic-paper-plastic laminate.

25      3. A pouch as set forth in claim 1, in which the outer ply film is metallized to provide a moisture barrier.

4. A pouch as set forth in claim 1, in which a metal foil intermediate ply is sandwiched between the outer ply and the inner ply and is cold laminated thereto.

30      5. A pouch as set forth in claim 1, in which the outer or inner film plies are formed of a polyester film, a polyethylene film, or a polypropylene film.

6. A pouch as set forth in claim 1, in which the outer film ply has a glass transition temperature that is higher than that of the inner film ply.

7. A pouch as set forth in claim 1, in which the envelope is formed by two superposed panels of said laminate sheeting which are marginally sealed together to define a pocket to accommodate the product.

8. A pouch as set forth in claim 1, in which the panels are sealed together to define a spout communicating with the pocket and leading to an outlet.

10 9. A pouch as set forth in claim 2, in which the outer surface of the outer ply is corona discharge treated to render it wettable to adhesives, and further comprising a paper sheet which is adhesively cold laminated to the outer surface of the outer ply.

15 10. A pouch as set forth in claim 9, in which the outer surface of the inner ply is corona discharge treated to render it wettable to adhesives, and further comprising a paper sheet which is adhesively cold laminated to the outer surface of the inner ply.

11. A pouch as set forth in claim 1, in which the adhesive is an acrylic copolymer or a polyacrylate copolymer.

20 12. A flexible plastic-paper-plastic laminate capable of being converted by conventional equipment into envelopes, bags and other dilatable container products normally made of paper which initially are in a flat state, said sheeting comprising:  
25 a printable paper sheet having inside and outside surfaces;  
a first reinforcing film of synthetic oriented plastic material having an inner surface treated to increase its dynes and its affinity to adhesives and being cold-laminated by a water-based adhesive to the inside surface of the paper sheet; and  
30 a second reinforcing film of synthetic oriented plastic material having an inner surface treated to increase its dynes and its affinity to adhesives and being cold-laminated by a water-based adhesive to the outside surface of the paper sheet;

RECEIVED  
U.S. PATENT AND TRADEMARK OFFICE

whereby the product made from the sheeting has moisture resistance and exceptional tear and burst strength.

13. A laminate sheeting as set forth in claim 12, wherein each film is biaxially  
5 oriented.

14. A laminate sheeting as set forth in claim 12, wherein said water-based adhesive is an acrylic polymer or a polyacrylate copolymer.

10 15. A laminate sheeting as set forth in claim 12, wherein each film is formed of polyester, polypropylene or polyethylene.

15 16. A laminate sheeting as set forth in claim 12, wherein the paper sheet is formed by Kraft paper or white paper

15 17. A laminate sheeting as set forth in claim 12, wherein an outer surface of one of the plastic films is surface treated to increase its dynes and its affinity to adhesives prior to lamination and further comprising a facing sheet of paper cold laminated to the treated outer surface of the plastic film.

20 18. A laminate sheeting as set forth in claim 17, wherein the paper sheet is formed of coated paper.

25 19. A laminate sheeting as set forth in claim 17, wherein an outer surface of the other plastic film is surface treated to increase its dynes and its affinity to adhesives prior to lamination and further comprising a facing sheet of paper cold laminated to the treated outer surface of the other plastic film.

30 20. A laminate sheeting as set forth in claim 19, wherein the second paper sheet is formed of coated paper.